

Amendments to the Claims

Please amend Claim 1 as indicated in the Complete Listing of Claims below:

Complete Listing of Claims

Claim 1 (currently amended): A micromechanical dynamometer, comprising:

- a) a substrate;
- b) a ring-shaped high-compliance deflection element comprising at least one anchor site and at least one input site;
- c) one anchor for each anchor site, extending between the substrate and said anchor site;
- d) a force coupler transferring force from an external source to the at least one input site; and,
- e) at least one distance scale for optically measuring a deflection of the high-compliance deflection element in response to the force provided from the external source, with the distance scale being functionally attached to the high-compliance deflection element.

Claim 2 (original): The dynamometer of claim 1, wherein the high-compliance deflection element comprises crystalline silicon, polycrystalline silicon, amorphous silicon, silicon oxide, silicon nitride, amorphous diamond, or a sol-gel glass.

Claim 3 (original): The dynamometer of claim 1, wherein the high-compliance deflection element comprises an annulus of material, said annulus having the shape of a polygon, and essentially constant thickness normal to said polygon.

Claim 4 (original): The dynamometer of claim 3, wherein said high-compliance deflection element has a line of mirror symmetry.

Claim 5 (original): The dynamometer of claim 3, wherein said polygon is a regular polygon.

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Claim 6 (original): The dynamometer of claim 1, wherein the high-compliance deflection element comprises a circular annulus having a rectangular cross-section of essentially constant dimensions throughout.

Claim 7 (previously presented): The dynamometer of claim 1, wherein each distance scale operates in combination with an indicator which is mechanically coupled to a displacement of the high-compliance deflection element.

Claim 8 (previously presented): The dynamometer of claim 7, wherein each indicator is coupled to a different point on the deflection element.

Claim 9 (previously presented): The dynamometer of claim 7, wherein each distance scale is optically readable so that displacement of the indicator can thereby be quantified optically.

Claim 10 (original): The dynamometer of claim 1, further comprising a calibration force input.

Claim 11 (original): The dynamometer of claim 10, wherein the calibration force input is integral with the force coupler.

Claim 12 (original): The dynamometer of claim 1, further comprising a deflection element restraint system.

Claim 13 (original): The dynamometer of claim 12, wherein said restraint system comprises motion guides.

Claim 14 (original): The dynamometer of claim 13, wherein said restraint system comprises ring constraints.